

# Universal Controller Compliance Addendum

Please read all cautions and warnings inside.

High End



SYSTEMS  
LIGHTING-WORLD-WIDE®

High End Systems Inc.  
2217 West Braker Lane  
Austin, Texas 78758 U.S.A.



P/N 60600056

Version 1.3

# Compliance Addendum

## Introduction

The following pages are provided for European compliance. The information in this addendum applies to the *Universal Controller User Manual* (revision 2.0, P/N 6060016). This user manual will be revised to incorporate compliance information.

# Declaration of Conformity

according to ISO/IEC Guide 22 and EN45104

**Manufacturer's name:** Lightwave Research

**Manufacturer's address:** Lightwave Research  
High End Systems Inc.  
2217 West Braker Lane  
Austin, Texas 78758  
U.S.A.

Declares that the product

**Product Name:** Universal Controller

**Product Number:** Universal Controller

**Product Options:** All


conforms to the following EEC directives:

73/23/EEC, as amended by 93/68/EEC  
89/336/EEC, as amended by 92/31/EEC and 93/68/EEC

Equipment referred to in this declaration of conformity first manufactured in 1995 in compliance with the following standards:

**Safety:** EN 60950 : 1992  
A1 : 1993  
A2 : 1994

**EMC:** EN 55081-1 : 1992  
IEC 801-2 : 1991 Level 2 (4/8 kV)  
IEC 801-3: Draft 5 Level 2 (3 V/m)  
IEC 801-4: 1988 Level 1 (.5 kV/.25 kV)



U.S.A., Wednesday, September 17, 1997  
Lanny Derryberry, Compliance Engineer

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**IMPORTANT SAFETY INFORMATION**

INSTRUCTIONS PERTAINING TO CONTINUED PROTECTION AGAINST FIRE, ELECTRIC SHOCK, AND INJURY TO PERSONS ARE FOUND IN APPENDIX A.

READ ALL CAUTIONS AND WARNINGS PRIOR TO ASSEMBLY, MOUNTING, AND OPERATING THIS EQUIPMENT.

**IMPORTANT: INFORMATIONS DE SÉCURITÉ**

INSTRUCTIONS RELATIVES À UNE PROTECTION CONTINUE CONTRE L' INCENDIE, LE CHOC ÉLECTRIQUE, ET CONTRE DES BLESSURES POSSIBLES SUR DES INDIVIDUS SE TROUVENT DANS L'APPENDICE A.

PRIÈRE DE LIRE TOUTES LES PRÉCAUTIONS ET LES AVERTISSEMENTS AVANT D'ASSEMBLER, DE MONTER, ET DE FAIRE FONCTIONNER CET ÉQUIPEMENT.

**WICHTIGE SICHERHEITSHINWEISE**

DIE NACHSTEHENDEN HINWEISE BETREFFEN DEN SCHUTZ GEGEN BRAND, ELEKTRISCHEN SCHLAG, SOWIE VERLETZUNGEN. SIE BEFINDEN SICH IN APPENDIX A.

LESEN SIE ALLE WARNUNGEN SORGFÄLTIG, BEVOR SIE DAS GERÄT ZUSAMMENBAUEN, INSTALLIEREN UND BENUTZEN!

**INFORMACIÓN IMPORTANTE DE SEGURIDAD**

SE ENCUENTRAN EN EL APÉNDICE A LAS INSTRUCCIONES CONCERNIENTES A LA PROTECCIÓN CONTINUA CONTRA INCENDIO, CHOQUE ELÉCTRICO, Y LESIONES A PERSONAS.

POR FAVOR LEA TODAS LAS PRECAUCIONES Y LAS ADVERTENCIAS ANTES DE ENSAMBLAR, MONTAR Y OPERAR ESTE EQUIPO.

**INFORMAZIONI IMPORTANTI DI SICUREZZA**

ISTRUZIONI PERTINENTI LA PROTEZIONE CONTRO IL FUOCO, LE SCOSSE ELETTRICHE, I DANNI ALLE PERSONE SI TROVANO NEL APPENDICE A.

LEGGERE TUTTI GLI AVVERMENTI PRIMA DI MONTARE E USARE QUESTO APPARECCHIO.

## Equipment Ratings and Specifications

Model: Universal Controller

Manufacturer: Lightwave Research  
High End Systems, Inc.  
2217 West Braker Lane  
Austin, Texas 78758  
U.S.A.

Rated Voltage: 115/230 VAC Only

Rated Current: 250/150 mA

Rated Frequency: 50-60 Hz

Class 1 equipment-For continued protection against electric shock, connect this equipment to a grounded power source only. Use in dry locations only.



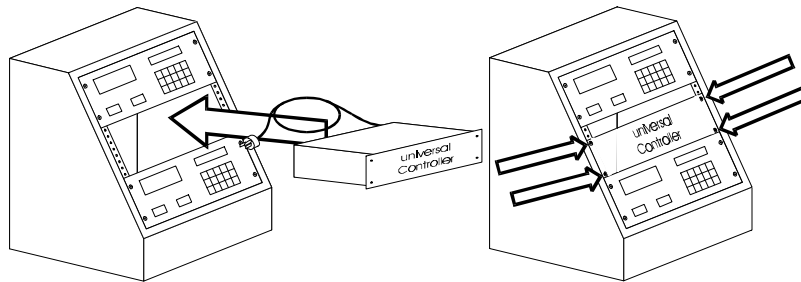
## Setup Instructions

The cores in the mains lead are coloured in accordance with the following code:

- green and yellow: earth
- blue: neutral
- brown: live

## Rack Mounting Procedure

The Universal Controller is designed to mount into an EIA Standard 19-inch equipment rack. The unit occupies three standard rack spaces.



1. Insert the unit into the front of the equipment rack. There must be at least 5.25 inches of available rack space. Be sure to feed the power cord in first, being careful not to pinch or otherwise damage the power cord. Do not use the unit if the power cord is damaged.
2. Attach the unit to the equipment rack by placing mounting screws through the two mounting holes behind the handles on each side of the controller. Attach the unit by the lower two mounting holes first as this is where the majority of weight is supported. Finish by attaching the unit through the remaining two holes.
3. The primary disconnect on this device is the power cord. The cord should be accessible or be placed into a power strip with an accessible on/off switch.

# Appendix A


## IMPORTANT SAFETY INFORMATION

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### **WARNING: FOR CONTINUED PROTECTION AGAINST FIRE.**

1. This equipment is designed for connection to a branch circuit having a maximum overload protection of 20 A.
2. The primary disconnect device for unit is the line cord cap (plug). During installation, assure that the power to this unit can be interrupted or the line cord unplugged in case of emergency.

### **WARNING: FOR CONTINUED PROTECTION AGAINST ELECTRIC SHOCK.**

1. Refer servicing to qualified service personnel. No user serviceable parts inside.
  2. Do not expose to rain or moisture.
  3. If this equipment was received without a line cord plug, attach the appropriate line cord plug according to the following code:
    - **BROWN-LIVE**
    - **BLUE-NEUTRAL**
    - **GREEN/YELLOW-EARTH**
  4. As the colours of the cores in the mains lead of this equipment may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
    - the core which is coloured green and yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol , or coloured green or green and yellow.
    - the core which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
    - the core which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
- THIS EQUIPMENT MUST BE EARTHED.**

## Appendice A

### **IMPORTANT: INFORMATIONS DE SÉCURITÉ**

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#### **MISE EN GARDE: POUR UNE PROTECTION PERMANENTE CONTRE LES INCENDIES.**

1. Cet équipement est conçu pour connexion à un circuit de dérivation ayant une protection de surcharge maximum de 20 A.
2. L'appareil principal de débranchement pour cette unité est le culot du cordon électrique (prise). En cas d'urgence, durant l'installation, assurez-vous que le courant pour cette unité puisse être interrompu.

#### **MISE EN GARDE: POUR UNE PROTECTION PERMANENTE CONTRE LES CHOCS ÉLECTRIQUES.**

1. L'utilisateur ne peut pas accéder aux pièces à l'intérieur de cet appareil. Seul du personnel qualifié est habilité à réparer cet appareil.
2. Ne pas exposer l'appareil à la pluie ou l'humidité.
3. Si l'appareil n'a pas été livré avec une prise de cordon électrique, attacher la prise de corde électrique conformément au code suivant:
  - **BRUN- BRANCHE**
  - **BLEU- NEUTRE**
  - **VERT/JAUNE - TERRE**

**L'EQUIPEMENT DOIT ETRE MIS A LA TERRE.**



# Anhang A

## WICHTIGE SICHERHEITSHINWEISE

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### **WARNUNG: ZUM SCHUTZ VOR BRANDGEFAHR.**

1. Dieses Gerät ist für den Anschluß an ein Stromnetz mit einem Überlastungsschutz von höchstens 20 A bestimmt.
2. Am sichersten kann das Gerät durch Ziehen des Netzkabelsteckers abgeschaltet werden. Stellen Sie bei der Installation sicher, da sich im Notfall die Stromversorgung zum Gerät abschalten läßt oder das Netzkabel aus der Steckdose gezogen werden kann.

### **WARNUNG: ZUM SCHUTZ GEGEN GEFÄHRLICHE KÖRPERSTRÖME.**

1. Das Gerät enthält keine wartungsfähigen Teile. Service sollte stets nur von Fachpersonal durchgeführt werden.
2. Vor Feuchtigkeit und Nässe schützen.
3. Falls dieses Gerät ohne Netzstecker geliefert wurde, schließen Sie bitte ein Netzstecker nach folgendem Farbschlüssel an:

- **BRAUN- STROMFÜHREND**
- **BLAU- NEUTRAL**
- **GRÜN/GELB- GEERDET**

**DIESES GERÄT MUSS GEERDET WERDEN**

# Apéndice A

## INFORMACIÓN IMPORTANTE DE SEGURIDAD

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### **ADVERTENCIA: PARA PROTECCIÓN CONTINUA CONTRA INCENDIOS.**

1. Este equipo está diseñado para conectarse a un circuito derivado con protección máxima contra aflujos de al menos 20 amperios.
2. El aparato principal de desconexión por esta unidad es el cable de alimentación (enchufe). Durante la instalación, asegúrese que la potencia de esta unidad puede ser interumpida en caso de emergencia.

### **ADVERTENCIA: PARA LA PROTECCIÓN CONTINUA CONTRA ELECTROCUCIONES.**

1. El interior de la unidad no contiene repuestos que puedan ser reparados por el usuario. Solicite el servicio de reparación de personal calificado.
2. No exponga la unidad a la lluvia o a la humedad.
3. Si se ha recibido este equipo sin un enchufe macho de cable de alimentación, conecte el enchufe macho de cable de alimentación adecuado según los códigos siguientes:
  - **MARRÓN - CON CORRIENTE**
  - **AZUL - NEUTRO**
  - **VERDE/AMARILLO - TIERRA**

**ESTE EQUIPO DEBE CONECTARSE A TIERRA.**

# Appendice A

## INFORMACIÓN IMPORTANTE DE SEGURIDAD

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### AVVERTENZA: PER PREVENIRE INCENDI.

1. Questo apparecchio può essere connesso ad un circuito ramificato con una protezione di massima di 20A.
2. Questa apparecchiatura viene disconnessa principalmente attraverso la spina del cavo di alimentazione. Durante l'installazione occorre assicurarsi che, si possa togliere tensione alla apparecchiatura o che si possa disconnettere il cavo di alimentazione in caso di emergenza.

### AVVERTENZA: PER PREVENIRE LE SCOSSE ELETTRICHE.

1. L'utente non deve riparare nessuna parte dentro l'unità'. Per qualsiasi riparazione rivolgersi al personale specializzato.
2. Questa apparecchiatura non deve essere esposta ne alla pioggia ne all'umidità'.
3. Nel caso in cui questa apparecchiatura fosse ricevuta senza il debito cavo completo di spina, collegarne uno appropriato seguendo i successivi codici:

- **MARRONE-SOTTO TENSIONE**
- **BLU-NEUTRALE**
- **VERDE/GIALLO-A TERRA**



QUESTA APPARECCHIATURA DEVE METTERSI A TERRA.

## **Appendiks A**

### **VIGTIG FIKKER HEDS INFORMATION**

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#### **ADVARSEI: RESKYTTEKSE MOD ELEKTRISK SHOCK.**

1. Vigtigt! Ledere med groen/gul isolation ma kun tilsluttes en klemme maerket  eller .

## **Appendix B**

### **FCC Information**

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This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.